

*METHOD FOR THE ACCELERATION AND SIMPLIFICATION OF FILE SYSTEM
LOGGING TECHNIQUES USING STORAGE DEVICE SNAPSHOTS*

ABSTRACT

This invention presents a method and system to emulate logging or journaling file systems by means of a snapshot mechanism. Use of the snapshot mechanism reduces the number of system bus calls during log or journal updates and recalls in case of file recovery. The snapshot mechanism is implemented in hardware to provide for speedy and reliable data transfers. Overall system performance thereby is improved with an average reduced number of calls to the system memory bus. The present invention offers a cost effective way of retrofitting existing file systems with a journaling or logging capability.